

In the Claims:

Claims 2-4, 8 and 11 are amended herein. Claims 1 and 5-7 are canceled. The remaining claims are not amended in this response.

1. (canceled)

2. (currently amended) The receiver of double conversion system according to claim ~~[[1]]~~ 8, wherein said first mixing circuit converts a frequency of a signal outputted from said high frequency amplification circuit to a frequency higher than a frequency of a broadcast wave, and

wherein said second mixing circuit converts a frequency of a signal outputted from said first mixing circuit to a frequency lower than the frequency of the broadcast wave.

3. (currently amended) The receiver of double conversion system according to claim ~~[[1]]~~ 8, wherein said tuning coil included in said antenna tuning circuit is a bar antenna in which a conducting wire is wound around a magnetic core.

4. (currently amended) The receiver of double conversion system according to claim ~~[[1]]~~ 8, wherein said tuning coil included in said antenna tuning circuit is a loop antenna in which a conducting wire is wound in a loop shape.

5. (canceled)

6. (canceled)

7. (canceled)

8. (currently amended) ~~The receiver of double conversion system according to claim 7,~~ A receiver of double conversion system comprising:

an antenna tuning circuit including a tuning coil and a variable-capacitance diode;

a high frequency amplification circuit for performing high frequency amplification for a signal outputted from said antenna tuning circuit;

first and second mixing circuits for performing frequency conversion twice for an output of said high frequency amplification circuit;

a detecting circuit for performing detection processing for an output of said second mixing circuit;

a digital-analog converter for generating a control voltage for setting a tuning frequency applied to said variable-capacitance diode included in said antenna tuning circuit;

a local oscillator for inputting a local oscillation signal whose frequency is variable to said first mixing circuit to which an output signal of said high frequency amplification circuit is inputted; and

a control section for setting the frequency of the local oscillation signal outputted from said local oscillator, and for generating a frequency setting data required for associating the tuning frequency of said antenna tuning circuit with the frequency of the local oscillation signal, and for inputting the frequency setting data to said digital-analog converter,

wherein said digital-analog converter comprises a temperature coefficient setting section constituted by including elements having predetermined temperature coefficients,

wherein a device constant of said temperature coefficient setting section as a whole is changed in accordance with ambient temperature,

wherein said digital-analog converter, said high frequency amplification circuit, said first and second mixing circuits, said detecting circuit and said local oscillator are formed on a same semiconductor substrate,

wherein said temperature coefficient setting section includes a plurality of resistances which are formed by a semiconductor manufacturing process and which have temperature coefficients different to each other, and

wherein a connection form of said plurality of resistances is set so that a temperature coefficient of said digital-analog converter reaches a predetermined value.

9. (original) The receiver of double conversion system according to claim 8, wherein each of said plurality of resistances is formed by a poly-silicon on a semiconductor substrate, and wherein the temperature coefficients of the resistances are made to be different by adjusting impurity concentration and carrier types of said poly-silicon.

10. (original) The receiver of double conversion system according to claim 8, wherein each of said plurality of resistances is formed by utilizing a p-type region or a n-type region on a semiconductor substrate, and wherein the temperature coefficients of the resistances are made to be different by adjusting impurity concentration and carrier types of said p-type region or said n-type region.

11. (currently amended) ~~The receiver of double conversion system according to claim 7,~~ A receiver of double conversion system comprising:

an antenna tuning circuit including a tuning coil and a variable-capacitance diode;

a high frequency amplification circuit for performing high frequency amplification for a signal outputted from said antenna tuning circuit;

first and second mixing circuits for performing frequency conversion twice for an output of said high frequency amplification circuit;

a detecting circuit for performing detection processing for
an output of said second mixing circuit;

a digital-analog converter for generating a control voltage
for setting a tuning frequency applied to said variable-
capacitance diode included in said antenna tuning circuit;

a local oscillator for inputting a local oscillation signal
whose frequency is variable to said first mixing circuit to which
an output signal of said high frequency amplification circuit is
inputted; and

a control section for setting the frequency of the local
oscillation signal outputted from said local oscillator, and for
generating a frequency setting data required for associating the
tuning frequency of said antenna tuning circuit with the
frequency of the local oscillation signal, and for inputting the
frequency setting data to said digital-analog converter,

wherein said digital-analog converter comprises a
temperature coefficient setting section constituted by including
elements having predetermined temperature coefficients,

wherein a device constant of said temperature coefficient
setting section as a whole is changed in accordance with ambient
temperature,

wherein said digital-analog converter, said high frequency
amplification circuit, said first and second mixing circuits,
said detecting circuit and said local oscillator are formed on a
same semiconductor substrate,

wherein said digital-analog converter comprises: a current source of which current value is set in accordance with a value of said inputted frequency setting data; and said temperature coefficient setting section into which the current generated by the current source flows, and wherein a voltage across said temperature coefficient setting section is outputted as said control voltage.

12. (new) The receiver of double conversion system according to claim 11, wherein said first mixing circuit converts a frequency of a signal outputted from said high frequency amplification circuit to a frequency higher than a frequency of a broadcast wave, and

wherein said second mixing circuit converts a frequency of a signal outputted from said first mixing circuit to a frequency lower than the frequency of the broadcast wave.

13. (new) The receiver of double conversion system according to claim 11, wherein said tuning coil included in said antenna tuning circuit is a bar antenna in which a conducting wire is wound around a magnetic core.

14. (new) The receiver of double conversion system according to claim 11, wherein said tuning coil included in said antenna tuning circuit is a loop antenna in which a conducting wire is wound in a loop shape.